

**Listing of Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An implantable immunoisolatory vehicle for providing a biologically active product or function to an individual, the immunoisolatory vehicle comprising:
  - (a) a core comprising a volume in excess of 1  $\mu$ l and at least about  $10^4$  living cells dispersed in a biocompatible matrix formed of a hydrogel hydrogen, said cells being capable of secreting a selected biologically active product or of providing a selected biological function to an individual; and
  - (b) an external diffusional surface jacket surrounding said core formed of a biocompatible hydrogel material free of said cells projecting externally thereof, wherein the hydrogel material does not ionically bond to a polymer of opposite charge on the core during formation of the jacket and wherein the jacket and the core form an interface free of an intermediate linking layer said jacket having a molecular weight cutoff below the molecular weight of substances essential for immunological rejection of the cells but permitting passage of substances between the individual and core through said jacket required to provide said biological product or function, said core and external jacket forming an interface substantially free of direct ionic bonding and of an intermediate linking layer.